

WHAT IS CLAIMED IS:

1. A method comprising:  
identifying an option limit order, said option limit order including information  
5 identifying a customer, information identifying a desired option, and information that  
indicates a limit price for said option limit order;  
receiving a substantially real time feed of option market data; and  
using the option market data in real time to identify at least one of a trade-  
through transaction relevant to said option limit order and a trade-at transaction  
10 relevant to said option limit order.
2. The method of claim 1, further comprising:  
generating an alert on the basis of said identified at least one of a trade-through  
transaction and a trade-at transaction.  
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3. The method of claim 2, further comprising:  
classifying the alert as one of active and inactive.
4. The method of claim 3, wherein the alert is classified as inactive because a  
20 corresponding trade-through transaction or trade-at transaction occurred within a  
predetermined period after an order time of the option limit order.
5. The method of claim 3, wherein the alert is classified as inactive because the  
option limit order is filled within a predetermined period after occurrence of a  
25 corresponding trade-through transaction or trade-at transaction.
6. The method of claim 3, wherein the alert is classified as inactive because a  
corresponding trade-through transaction or trade-at transaction occurred on a non-  
leading exchange.

7. The method of claim 1, further comprising:  
using the identified at least one of a trade-through transaction and a trade-at transaction to tabulate at least one of trade-through data and trade-at data for a plurality of option limit orders placed by the customer;
- 5 tabulating fulfillment data for the plurality of option limit orders placed by the customer; and  
comparing the tabulated fulfillment data to the tabulated at least one of trade-through data and trade-at data.
- 10 8. The method of claim 7, wherein the comparing includes dividing the tabulated fulfillment data by the tabulated at least one of trade-through data and trade-at data.
9. The method of claim 1, wherein the identifying the option limit order includes receiving the option limit order.
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10. The method of claim 1, further comprising:  
selecting an exchange for execution of the received option limit order.
11. The method of claim 10, further comprising:
- 20 forwarding said option limit order to the selected exchange to execute said option limit order, said forwarding based at least in part on one of said information identifying said customer and said desired option.
12. The method of claim 1, further comprising:
- 25 receiving exception data indicative of one or more market conditions at a time of occurrence of the identified at least one of a trade-through transaction and a trade-at transaction.

13. The method of claim 1, wherein said information identifying a desired option further includes: a type of said order, a security underlyer, an option expiration date, and a size of said order.
- 5 14. The method of claim 1, further comprising:  
disregarding the identified at least one of a trade-through transaction and a trade-at transaction in response to a market condition in effect at a time of the transaction.
- 10 15. A method comprising: ✓  
identifying an option limit order, said option limit order including information identifying a customer, information identifying a desired option, and information that indicates a limit price for said option limit order;  
identifying at least one of a trade-through transaction and a trade-at transaction  
15 relevant to said option limit order; and  
generating an alert substantially in real time on the basis of the identified at least one of a trade-through transaction and a trade-at transaction.
16. The method of claim 15, further comprising:  
20 classifying the alert as one of active and inactive.
17. The method of claim 16, wherein the alert is classified as inactive because a corresponding trade-through transaction or trade-at transaction occurred within a predetermined period after an order time of the option limit order.  
25
18. The method of claim 16, wherein the alert is classified as inactive because the option limit order is filled within a predetermined period after occurrence of a corresponding trade-through transaction or trade-at transaction.

19. The method of claim 16, wherein the alert is classified as inactive because a corresponding trade-through transaction or trade-at transaction occurred on a non-leading exchange.
- 5 20. A method comprising: *m*  
receiving a plurality of option limit orders, each of said option limit orders including information identifying a respective desired option, and information that indicates a respective limit price for said option limit order;  
tabulating at least one of trade-through data and trade-at data for the plurality  
10 of option limit orders;  
tabulating fulfillment data for the plurality of option limit orders; and  
comparing the tabulated fulfillment data to the tabulated at least one of trade-through data and trade-at data.
- 15 21. The method of claim 20, wherein the comparing includes dividing the tabulated fulfillment data by the tabulated at least one of trade-through data and trade-at data.
22. The method of claim 20, wherein the tabulating at least one of trade-through  
20 data and trade-at data includes purging cancelled transactions.
23. The method of claim 20, wherein the at least one of trade-through data and trade-at data corresponds only to transactions occurring on a leading exchange.
- 25 24. The method of claim 20, wherein the tabulating at least one of trade-through and trade-at data includes carrying over open option limit orders from a previous trading day.

25. The method of claim 20, wherein the tabulating at least one of trade-through data and trade at data includes tabulating at least one of trade-through data and trade-at data that pertains to a single customer.
- 5 26 The method of claim 20, wherein the tabulating at least one of trade-through data and trade at data includes tabulating at least one of trade-through data and trade-at data that pertains to option limit orders routed to a single exchange.
27. The method of claim 20, wherein the tabulating at least one of trade-through  
10 data and trade-at data and the tabulating fulfillment data are performed with respect to each trading day.
28. A method comprising:  
determining a set of option limit orders that are in effect during a trading day,  
15 each of said option limit orders including information identifying a respective desired option, and information that indicates a respective limit price for said option limit order;  
receiving options trading information indicative of options trading activity on a plurality of exchanges during the trading day; and  
20 after closing of the trading day, generating at least one of trade-through data and trade-at data for the determined set of option limit orders based on the received options trading information.
29. The method of claim 28, further comprising:  
25 purging cancelled transaction data from the received trading information before the generating of the at least one of trade-through data and trade-at data.
30. The method of claim 28, wherein the determining the set of option limit orders includes carrying over open limit orders from a previous trading day.

31. The method of claim 28, wherein all of the options trading information for the trading day is received after closing of the trading day.

32. An apparatus for generating quality data associated with an option limit order,  
5 comprising:

a processor; and

a storage device in communication with said processor and storing instructions adapted to be executed by said processor to

10 identify an option limit order, said option limit order including information identifying a customer, information identifying a desired option, and information that indicates a limit price for said option limit order;

receive a substantially real time feed of option market data; and

15 use the option market data in real time to identify at least one of a trade-through transaction relevant to said option limit order and a trade-at transaction relevant to said option limit order.

33. The apparatus of claim 32, wherein said storage device further stores instructions adapted to be executed by said processor to forward said option limit order to a selected one of a plurality of option exchanges to execute said option limit  
20 order, said forwarding based at least in part on one of said information identifying said customer and said desired option.

34. An apparatus for generating quality data associated with an option limit order, comprising:

25 a processor; and

a storage device in communication with said processor and storing instructions adapted to be executed by said processor to

identify an option limit order, said option limit order including information identifying a customer, information identifying a desired option, and information that indicates a limit price for said option limit order;

- 5        identify at least one of a trade-through transaction and a trade-at transaction relevant to said option limit order; and  
generate an alert substantially in real time on the basis of the identified at least one of a trade-through transaction and a trade-at transaction.

35.     An apparatus for generating quality data associated with a plurality of option  
10    limit orders, comprising:  
a processor; and  
a storage device in communication with said processor and storing instructions adapted to be executed by said processor to  
receive a plurality of option limit orders, each of said option limit  
15    orders including information identifying a respective desired option, and information that indicates a respective limit price for said option limit order;  
tabulate at least one of trade-through data and trade-at data for the plurality of option limit orders;  
tabulate fulfillment data for the plurality of option limit orders; and  
20    compare the tabulated fulfillment data to the tabulated at least one of trade-through data and trade-at data.

36.     An apparatus for generating quality data associated with a plurality of option  
limit orders, comprising:  
25        a processor; and  
a storage device in communication with said processor and storing instructions adapted to be executed by said processor to  
determine a set of option limit orders that are in effect during a trading day, each of said option limit orders including information identifying a respective

desired option, and information that indicates a respective limit price for said option limit order;

receive options trading information indicative of options trading activity on a plurality of exchanges during the trading day; and

5 generate, after closing of the trading day, at least one of trade-through data and trade-at data for the determined set of option limit orders based on the received options trading information.

37. A limit order protection system, comprising:

10 a communication device for receiving an option limit order, said option limit order including information identifying a customer, information identifying an option, and information that indicates a limit price for said option limit order;

means for receiving a substantially real time feed of option market data; and

15 means for using the option market data in real time to identify at least one of a trade-through transaction relevant to said option limit order and a trade-at transaction relevant to said option limit order.

38. A limit order protection system, comprising:

20 a communication device for receiving an option limit order, said option limit order including information identifying a customer, information identifying an option, and information that indicates a limit price for said option limit order;

means for identifying at least one of a trade-through transaction and a trade-at transaction relevant to said option limit order; and

25 means for generating an alert substantially in real time on the basis of the identified at least one of a trade-through transaction and a trade-at transaction.

39. A limit order protection system, comprising:

30 a communication device for receiving a plurality of option limit orders, each of said option limit orders including information identifying a respective option, and information that indicates a respective limit price for said option limit order;



means for tabulating at least one of trade-through data and trade-at data for the plurality of option limit orders;

means for tabulating fulfillment data for the plurality of option limit orders;

and

5 means for comparing the tabulated fulfillment data to the tabulated at least one of trade-through data and trade-at data.

40. A limit order protection system, comprising:

10 means for determining a set of option limit orders that are in effect during a trading day, each of said option limit orders including information identifying a respective desired option, and information that indicates a respective limit price for said option limit order;

means for receiving options trading information indicative of options trading activity on a plurality of exchanges during the trading day; and

15 means for generating, after closing of the trading day, at least one of trade-through data and trade-at data for the determined set of option limit orders based on the received options trading information.